

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

KAIFI LLC,

Plaintiff,

v.

VERIZON COMMUNICATIONS INC.;
CELLCO PARTNERSHIP D/B/A VERIZON
WIRELESS; VERIZON SERVICES CORP.;
VERIZON ENTERPRISE SOLUTIONS, LLC;
VERIZON BUSINESS GLOBAL LLC;
VERIZON BUSINESS NETWORK
SERVICES, LLC; VERIZON CORPORATE
SERVICES GROUP INC.; VERIZON DATA
SERVICES, LLC; VERIZON MEDIA INC.;
and VERIZON ONLINE, LLC,

Defendants.

Case No. 2:20-CV-280

JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff KAIFI LLC (“Plaintiff” or “KAIFI”) hereby alleges infringement of United States Patent No. 6,922,728 (“the ’728 Patent”) against Defendants Verizon Communications Inc. (“VZComms”); Cellco Partnership d/b/a Verizon Wireless (“VZWireless”); Verizon Services Corp. (“VZServices”); Verizon Enterprise Solutions, LLC (“VZEnterprise”); Verizon Business Global, LLC (“VZBizGlobal”); Verizon Business Network Services, LLC (VZBizNetwork); Verizon Corporate Services Group Inc. (“VZCorp”); Verizon Data Services, LLC (“VZData”); Verizon Media Inc. (“VZMedia”); and Verizon Online, LLC (“VZOnline”) (collectively, “Defendants” or “Verizon”) as follows:

THE PARTIES

1. Plaintiff KAIFI is a corporation organized and existing under the laws of the State

of Texas, having a principal place of business at 405 State Highway 121, Lewisville, Texas 75067.

2. Defendant VZComms is a corporation organized and existing under the laws of the State of Delaware, with a principal place of business at 1095 Avenue of the Americas, New York, New York 10036. Defendant VZComms may be served with process through its registered agent at CT Corporation System, 350 North St. Paul Street, Dallas, Texas 75201.

3. Defendant VZWireless is a general partnership organized and existing under the laws of the State of Delaware, with a principal place of business at One Verizon Way Basking Ridge, New Jersey 07920. Defendant VZWireless may be served with process through its registered agent at The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

4. Defendant VZServices is a corporation organized and existing under the laws of the State of Delaware, with a principal place of business at 1717 Arch Street, 21st Floor, Philadelphia, Pennsylvania 19103. Defendant VZServices may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

5. Defendant VZEnterprise is a limited liability company organized and existing under the laws of the State of Delaware, with a principal place of business at One Verizon Way Basking Ridge, New Jersey 07920. Defendant VZEnterprise may be served with process through its registered agent at The Corporation Trust Company, Corporation Trust Center, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

6. Defendant VZBizGlobal is a limited liability company organized and existing under the laws of the State of Delaware, with a principal place of business at One Verizon Way

Basking Ridge, New Jersey 07920. Defendant VZBizGlobal may be served with process through its registered agent at The Corporation Trust Company, Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801.

7. Defendant VZBizNetwork is a limited liability company organized and existing under the laws of the State of Delaware, with a principal place of business at 22001 Loudoun County Parkway, Ashburn, Virginia 20147. Defendant VZBizNetwork may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

8. Defendant VZCorp is a corporation organized and existing under the laws of the State of New York, with a principal place of business at One Verizon Way, Basking Ridge, New Jersey 07920. Defendant VZCorp may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

9. Defendant VZData is a limited liability company organized and existing under the laws of the State of Delaware, with a principal place of business at One East Telecom Parkway, B3E, Temple Terrace, Florida 33637. Defendant VZData may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

10. Defendant VZMedia is a corporation organized and existing under the laws of the State of Delaware, with a principal place of business at 770 Broadway, New York, New York 10003. Defendant VZMedia may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

11. Defendant VZOnline is a limited liability company organized and existing under the laws of the State of Delaware, with a principal place of business at 22001 Loudoun County

Parkway, Ashburn, Virginia 20147. Defendant VZOnline may be served with process through its registered agent at CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

12. Upon information and belief, Defendant VZComms is the parent corporation of Defendants VZWireless, VZServices, VZEnterprise, VZBizGlobal, VZBizNetwork, VZCorp, VZData, VZMedia, and VZOnline. Defendants have regular and established places of business throughout Texas and the Eastern District of Texas including at 1006 E End Blvd N, Marshall, Texas 75670, and 500 E Loop 281, Longview, Texas 75605.

JURISDICTION; VENUE; JOINDER

13. This action arises under the patent laws of the United States, Title 35 of the United States Code (“U.S.C.”) § 101 *et seq.*

14. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331, 1332, and 1338(a).

15. Defendants are subject to this Court’s specific and general personal jurisdiction consistent with the principles of due process and/or the Texas Long Arm Statute.

16. Defendants are registered with the Secretary of State to do business in the State of Texas. Defendants sell and offer to sell products and services throughout the State of Texas, including in this judicial district, and introduce infringing products and services into the stream of commerce knowing that they would be sold in the State of Texas and this judicial district.

17. Personal jurisdiction exists generally over Defendants because each Defendant has sufficient minimum contacts with the forum as a result of business conducted within the State of Texas and the Eastern District of Texas. Personal jurisdiction also exists over each Defendant because it, directly or through subsidiaries or intermediaries, makes, uses, sells, offers for sale, imports, advertises, makes available, and/or markets products within the State of Texas

and the Eastern District of Texas that infringe one or more claims of the '728 Patent, as alleged more particularly below.

18. Venue in this District is proper under 28 U.S.C. §§ 1400(b) and 1391(b)–(c) because each Defendant is subject to personal jurisdiction, resides and/or has a regular and established place of business, and has committed acts of infringement in this District. Each Defendant makes, uses, sells, offers to sell, and/or imports infringing products into and/or within this District, maintains a permanent and/or continuing presence within this District, and has the requisite minimum contacts with this District such that this venue is a fair and reasonable one. Upon information and belief, each Defendant has transacted and, at the time of the filing of the Complaint, is continuing to transact business within this District.

19. Defendants are properly joined under 35 U.S.C. § 299(a)(1) because, as set forth in greater detail below, Defendants commonly and/or jointly make, use, sell, offer to sell, and/or import infringing instrumentalities, such that at least one right to relief is asserted against Defendants jointly, severally, and in the alternative with respect to the same transactions, occurrences, or series of transactions or occurrences relating to the making, using, selling, offering to sell, and/or importing into the United States the same accused instrumentalities, as set forth in greater detail herein.

20. Defendants are properly joined under 35 U.S.C. § 299(a)(2) because, as set forth in greater detail below, Defendants make, use, sell, offer to sell in, and/or import into the United States the same or similar accused instrumentalities, such that questions of fact that are common to all Defendants will arise, as set forth in greater detail herein.

21. The '728 Patent was the subject of a prior litigation in this District, in *KAIFI LLC v. AT&T Inc., et al.*, Case No. 2:19-cv-00138-JRG (E.D. Tex.), making this action a “related”

case under this District's Local Patent Rule 2-6.

BACKGROUND

22. The '728 Patent, entitled "Optimal Internet Network Connecting and Roaming System and Method Adapted for User Moving Outdoors or Indoors," issued on July 26, 2005 to the Korea Advanced Institute of Science & Technology ("KAIST"), one of South Korea's premier research universities. A true and correct copy of the '728 Patent is attached hereto as Exhibit A.

23. KAIST was founded in 1971 as Korea's first research-oriented science and engineering institution, has over 9,000 students and 1,100 faculty researchers, and holds more than 3,300 registered patents worldwide. KAIST has ranked 1st in Korea and 21st in the world for engineering and information technologies. In 2017, Thomson Reuters named KAIST as the 6th most innovative university in the world. The *Times Higher Education* ranked KAIST as the 3rd best university in the world under 50 years old.

24. Plaintiff KAIFI is an intellectual property consulting company that promotes and manages intellectual property directed to telecommunications technologies, which are developed by Korean research institutes and universities, such as KAIST. KAIFI owns by assignment all right, title, and interest in and to the '728 Patent, including the right to all remedies for past and ongoing infringement thereof, and thus has standing to sue for infringement.

25. The sole inventor of the '728 Patent is Dong-Ho Cho, who is currently a professor of electrical engineering at KAIST. Prof. Cho has been the Dean of the College of Information Science & Technology at KAIST, served as the director of KAIST's Wireless Power Transfer Technology Research Center, served as an advisor to the Korean Ministry of Information and Communication from 2003 to 2007, and heads the LG-KAIST 6G Research Center.

26. Prof. Cho is the named inventor on over 70 U.S. patents and hundreds of patents

worldwide, and is the author of numerous technical publications. His patents and publications have been cited over 8,000 times. He has conducted research into network interconnection technologies and integration of packet-based voice and data terminals with cellular mobile networks since the late 1980s. He has been recognized as a leading scholar on wireless communications, including next-generation “5G” mobile networks.

27. Prof. Cho and his research have been recognized with numerous distinctions. For example, the Republic of Korea awarded Prof. Cho a Presidential Citation and the Red Stripes Order of Service Merit, for his contributions to the fields of advanced mobile communications and wireless technologies. The Korean Institute of Communications and Information Sciences has recognized and awarded Prof. Cho for his contributions. The Korean newspaper, *Dong-a Ilbo*, named Prof. Cho as among Korea’s 100 leading pioneers.

28. The ’728 Patent is directed to an Internet network connecting and roaming system and method. The ’728 Patent provides significant benefits and solutions. For example, with the patented invention, voice and data communications may be seamlessly transitioned to a Wi-Fi network from an LTE network. This reduces load and congestion on cellular networks, reduces network costs, and increases voice and data communication coverage quality and range.

29. In April 2019, KAIFI filed suit on the ’728 Patent against various AT&T entities in *KAIFI LLC v. AT&T Inc. et al.*, Case No. 2:19-cv-00138-JRG (“AT&T Case”). The Court issued a claim construction order on April 17, 2020. Trial was scheduled for September 14, 2020. The AT&T Case was dismissed on August 8, 2020 subject to the terms of a written settlement agreement.

VERIZON ADOPTS THE ’728 PATENT TECHNOLOGY

30. Defendants provide wireless network and system instrumentalities that enable seamless voice and data communication services, including Defendants’ Wi-Fi Calling, and, on

information and belief, other reasonably similar services from Defendants and third parties.

31. In or around 2015, Verizon began offering Wi-Fi Calling. According to Verizon, “Verizon customers with Advanced Calling . . . can make and receive calls and initiate video calls over a Wi-Fi Internet connection. Verizon customers already enjoy the largest and most reliable wireless network in the United States, and Advanced Calling with Wi-Fi Calling provides an alternative for those who wish to use Wi-Fi in the home, office or while traveling.” According to Verizon, “Once Advanced Calling is enabled, customers can activate Wi-Fi Calling. When a customer uses Advanced Calling on our 4G LTE network and travels outside of coverage, the call will seamlessly transfer to a known Wi-Fi hotspot when available.”

32. According to Verizon, “Making a voice or video call over Wi-fi is the same as a regular call.” According to Verizon, “Wi-Fi Calling lets you make and receive voice and video calls over a Wi-Fi connection instead of using your cellular connection. If you have a Wi-Fi connection and are in an area where voice service is weak or unavailable, use Wi-Fi calling to continue making voice calls.” According to Verizon, “A Wi-Fi Calling icon will appear on your screen during the call to confirm that it is using Wi-Fi to connect it.”

33. Verizon’s current selection of smartphones and plans are “Wi-Fi Calling-capable.” Verizon instructs customers on how to use Wi-Fi Calling. For example, the Verizon web-site provides instructions for activating Wi-Fi Calling on the Verizon wireless network for Android devices and the Apple iPhone.

34. According to Verizon, “When you turn on Wi-Fi Calling you must be connected to the Verizon network in the US.” “To use Wi-Fi Calling, HD Voice must be actived on your device. It is activated by default on our current selection of smartphones.”

35. According to Verizon, the Wi-Fi Calling feature is included in the monthly voice

plan. According to Verizon, Wi-Fi Calling uses about 1 MB/minute of data for a voice call and 6-8 MB of data for a 1-minute video call. Under Verizon's subscription plans, Verizon may temporarily slow data speeds after a certain amount of data has been used by subscribers.

THE ACCUSED INSTRUMENTALITIES

36. The Accused Instrumentalities include systems, networks, and components and services thereto used and controlled by Defendants for implementing seamless network transition, including off-loading to a Wi-Fi network, such as through their Wi-Fi Calling system and service, and include both native and third-party, over the top (OTT) voice and data applications.

COUNT 1

37. Each Defendant infringes at least claim 1 of the '728 Patent.

38. Each Defendant has committed and continues to commit acts of direct infringement by making, using, selling, offering to sell, and/or importing Accused Instrumentalities, including but not limited to instrumentalities comprising a wireless network and system, user mobile devices, Wi-Fi Calling service, internet service provisioning, and Wi-Fi access points and services, which include nationwide Wi-Fi hotspots.

39. Exhibit B details the manner in which the Accused Instrumentalities infringe the '728 Patent by way of a representative example that charts Defendants' Wi-Fi Calling. On information and belief, the manner of infringement by all Accused Instrumentalities is materially the same as this representation.

40. Defendants have actual notice of the '728 Patent and/or their infringing activities relating to the '728 Patent. For example, on August 27, 2020, KAIFI provided Verizon with the '728 Patent and a claim chart, and offered to license the '728 Patent. Defendants have been aware of the '728 Patent since at least the filing date of this complaint, when they were put on

notice of infringement.

41. Each Defendant has been and is indirectly infringing the '728 Patent by actively inducing the direct infringement by others of the '728 Patent, in the United States, the State of Texas, and this District.

42. Each Defendant has induced and continues to induce through affirmative acts customers and third parties, such as wireless subscribers and/or Internet service users, to directly infringe the '728 Patent under 35 U.S.C. § 271(b) by making, using, selling, offering for sale, and/or importing into the United States the Accused Instrumentalities.

43. Defendants infringe the '728 Patent by creation and control of systems utilized by end users, including Defendant's direct customers and users who contract with Mobile Virtual Network Operators (MVNOs). Upon information and belief, per contractual agreements with Defendants, MVNOs market differently branded-virtual mobile network services to users, that are implemented and operated on and through Defendant's actual networks.

44. The mechanisms by which Defendants infringe the '728 Patent through MVNOs is provided in more detail in Exhibit B and at least a partial list of MVNOs through which Verizon infringes the '728 Patent is found in Exhibit C.

45. Each Defendant specifically intended and was aware that the ordinary and customary use of the Accused Instrumentalities would infringe the '728 Patent.

46. The affirmative acts of inducement by Defendants include, but are not limited to, any one or a combination of encouraging and/or facilitating third party infringement through the advertisement, marketing, and dissemination of the Accused Instrumentalities and their components, including via Defendants' wireless subscribers and/or internet service users; and creating and publishing promotional and marketing materials, supporting materials, product

manuals, and/or technical support and information relating to the Accused Instrumentalities, including but not limited to Wi-Fi Calling and off-loading to a Wi-Fi network, which describe, train, and instruct users on the implementation of the Accused Instrumentalities and their components, including but not limited to mobile devices, Wi-Fi networks, and cellular networks.

47. Defendants knew that the induced conduct would constitute infringement, and intended said infringement at the time of committing the aforementioned acts, such that those acts and conduct have been and continue to be committed with the specific intent to induce infringement, or to deliberately avoid learning of the infringing circumstances at the time these acts were committed, so as to be willfully blind to the infringement they induced.

48. Defendants took active steps to encourage end users to use and operate the Accused Instrumentalities, including but not limited to Wi-Fi Calling and off-loading to a Wi-Fi network, despite knowing of the '728 Patent in the United States, in a manner they knew directly infringes each element of at least claim 1 of the '728 Patent. Further, Defendants provided product manuals and other technical information that cause their subscribers, customers, and other third parties to use and to operate the Accused Instrumentalities for their ordinary and customary use, such that Defendants' customers and other third parties have directly infringed the '728 Patent, through the normal and customary use of the Accused Instrumentalities.

49. Therefore, each Defendant is liable for infringement of the '728 Patent and that infringement has been and continues to be willful in nature.

50. Plaintiff KAIFI has incurred and will continue to incur substantial damages.

51. Plaintiff KAIFI has been and continues to be irreparably harmed by each Defendant's infringement.

52. Therefore, Plaintiff KAIFI is entitled to an injunction, actual and/or compensatory

damages, reasonable royalties, pre- and post-judgment interest, enhanced damages, attorney fees, and costs.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff KAIFI respectfully requests that this Court:

- A. Enter judgment in favor of Plaintiff KAIFI that the '728 Patent is valid and enforceable;
- B. Enter judgment in favor of Plaintiff KAIFI that each Defendant has infringed and continues to infringe the '728 Patent, and find that such infringement is willful;
- C. Award Plaintiff KAIFI all monetary relief available under the laws of the United States, including but not limited to 35 U.S.C. § 284;
- D. Order each Defendant to pay ongoing royalties in an amount to be determined for any continued infringement after the date that judgment is entered;
- E. Declare this case exceptional and award Plaintiff KAIFI its reasonable attorney fees under 35 U.S.C. § 285;
- F. Enjoin each Defendant, and its officers, subsidiaries, agents, servants, and employees, and all persons in active concert with any of the foregoing, from further infringement of the '728 Patent; and
- G. Grant Plaintiff KAIFI all such other relief as the Court deems just and equitable.

DEMAND FOR JURY TRIAL

Plaintiff KAIFI demands a jury trial on all issues so triable pursuant to Rule 38 of the Federal Rules of Civil Procedure.

Date: August 28, 2020

Respectfully submitted,

/s/ Robert Christopher Bunt

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